

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A method for accessing variables from an operating system, comprising:

receiving a command from an application program for at least one variable maintained by the operating system;

determining whether the at least one variable is in a data object;

if the at least one variable is in the data object, returning the at least one variable to the application program; and

if the at least one variable is not in the data object,

executing a the command from ~~an~~ the application program to store at least one variable maintained by the operating system in a the data object accessible to the application program, wherein the application program is executing on the operating system;

determining an operating system native command to use to retrieve the at least one variable;

executing ~~an~~ the operating system native command in response to the command from the application program to retrieve the ~~requested~~ at least one variable into a buffer; and

storing the retrieved at least one variable from the buffer into ~~in~~ the data object; and

executing the command from the application program to retrieve the at least one variable from the data object for return to the application program.

2. (Cancelled)

3. (Original) The method of claim 1, wherein the application program is a first application program, further comprising:

receiving a request from a second application program for at least one variable maintained by the operating system; and

returning the requested at least one variable from the data object populated as a result of the command executed by the first application program.

4. (Currently Amended) The method of claim 1, wherein the ~~requested~~ at least one variable retrieved as a result of execution of the command from the application program is a set of environment variables.

5. (Currently Amended) The method of claim 1, further comprising:
determining a type of the operating system; and
selecting the operating system native command from a set of native operating system commands for different types of operating systems, wherein the selected operating system native command is capable of being executed on the operating system to retrieve the ~~requested~~ at least one variable, and wherein the application program is capable of executing on each of the different types of operating systems.

6. (Currently Amended) The method of claim 1, wherein the command from the application program and the operating system native command are executed in a first process and the application program is executed in a second process.

7. (Currently Amended) The method of claim 1, wherein the command from the application program is for storing multiple variables, and wherein retrieving the ~~requested~~ variables comprises generating a data stream including the variables, further comprising:

reading the variables from the data stream into a the buffer; and

processing each line in the buffer to determine each variable name and value, wherein each determined variable name and value is stored in the data object.

8. (Original) The method of claim 7, wherein determining each variable name and value comprises:

determining a location of an equal sign;
setting the variable name to the string preceding the equal sign; and
setting the variable value to the string following the equal sign.

9. (Currently Amended) The method of claim 8, wherein the variable name and value for each variable are maintained on at least one line, further comprising:
processing each line in the data stream ~~on a~~ line-by-line;
determining whether each line includes the equal sign, wherein, for each line including the equal sign, the variable name is set to the string preceding the equal sign and the variable value is set to the string following the equal sign; and
appending the content of each line not including the equal sign to the variable value.

10. (Currently Amended) A computer system for accessing variables from an operating system, comprising:

a computer;
a memory storing at least one variable;
program logic executed by the computer, comprising:

means for receiving a command from an application program for at least one variable maintained by the operating system;

means for determining whether the at least one variable is in a data object;

if the at least one variable is in the data object, means for returning the at least one variable to the application program; and

if the at least one variable is not in the data object,

(i) means for executing a the command from ~~an~~ the application program to store at least one variable maintained by the operating system in a the data object in the memory accessible to the application program, wherein the application program is executing on the operating system;

(ii) means for determining an operating system native command to use to retrieve the at least one variable;

~~(ii)~~ (iii) means for executing ~~an~~ the operating system native command in response to the command from the application program to retrieve the ~~requested~~ at least one variable into a buffer; and

~~(iii)~~ (iv) means for storing the retrieved at least one variable from the buffer into in the data object; and

(v) executing the command from the application program to retrieve the at least one variable from the data object for return to the application program.

11. (Cancelled)

12. (Original) The system of claim 10, wherein the application program is a first application program, wherein the program logic further comprises:

means for receiving a request from a second application program for at least one variable maintained by the operating system; and

means for returning the requested at least one variable from the data object populated as a result of the command executed by the first application program.

13. (Currently Amended) The system of claim 10, wherein the ~~requested~~ at least one variable retrieved as a result of execution of the command from the application program is a set of environment variables.

14. (Currently Amended) The system of claim 10, wherein the program logic further comprises:

means for determining a type of the operating system; and

means for selecting the operating system native command from a set of native operating system commands for different types of operating systems, wherein the selected operating system native command is capable of being executed on the operating system to retrieve the ~~requested~~ at least one variable, and wherein the application program is capable of executing on each of the different types of operating systems.

15. (Currently Amended) The system of claim 10, wherein the program logic further comprises means for executing the command from the application program and the operating system native command in a first process and mean for executing the application program in a second process.

16. (Currently Amended) The system of claim 10, wherein the command from the application program is for storing multiple variables, and the program logic for retrieving the ~~requested~~ variables comprises means for generating a data stream including the variables, and where the program logic further comprises:

means for reading the retrieved variables from the data stream into a the buffer; and

means for processing each line in the buffer to determine each variable name and value, wherein each determined variable name and value is stored in the data object.

17. (Original) The system of claim 16, wherein the program logic for determining each variable name and value comprises:

means for determining a location of an equal sign;

means for setting the variable name to the string preceding the equal sign; and

means for setting the variable value to the string following the equal sign.

18. (Currently Amended) The system of claim 17, wherein the variable name and value for each variable are maintained on at least one line, and wherein the program logic further comprises:

means for processing each line in the data stream ~~on a~~ line-by-line;

means for determining whether each line includes the equal sign, wherein, for each line including the equal sign, the variable name is set to the string preceding the equal sign and the variable value is set to the string following the equal sign; and

means for appending the content of each line not including the equal sign to the variable value.

19. (Currently Amended) An article of manufacture for use in accessing variables from an operating system, the article of manufacture comprising computer useable media accessible to a computer, wherein the computer usable media includes at least one computer program that is capable of causing the computer to perform:

receiving a command from an application program for at least one variable maintained by the operating system;

determining whether the requested at least one variable is in a data object;

if the requested at least one variable is in the data object, returning the at least one variable to the application program; and

if the requested at least one variable is not in the data object,

executing a the command from an the application program to store at least one variable maintained by the operating system in a the data object accessible to the application program, wherein the application program is executing on the operating system;

determining an operating system native command to use to retrieve the at least one variable;

executing ~~an~~ the operating system native command in response to the command from the application program to retrieve the ~~requested~~ at least one variable into a buffer; and

storing the retrieved at least one variable from the buffer into ~~in~~ the data object; and

executing the command from the application program to retrieve the at least one variable from the data object for return to the application program.

20. (Cancelled)

21. (Original) The article of manufacture of claim 19, wherein the application program is a first application program, further comprising:

receiving a request from a second application program for at least one variable maintained by the operating system; and

returning the requested at least one variable from the data object populated as a result of the command executed by the first application program.

22. (Currently Amended) The article of manufacture of claim 19, wherein the ~~requested~~ at least one variable retrieved as a result of execution of the command from the application program is a set of environment variables.

23. (Currently Amended) The article of manufacture of claim 19, further comprising:
determining a type of the operating system; and
selecting the operating system native command from a set of native operating system commands for different types of operating systems, wherein the selected operating system native

command is capable of being executed on the operating system to retrieve the ~~requested~~ at least one variable, and wherein the application program is capable of executing on each of the different types of operating systems.

24. (Currently Amended) The article of manufacture of claim 19, wherein the command from the application program and the operating system native command are executed in a first process and the application program is executed in a second process.

25. (Currently Amended) The article of manufacture of claim 19, wherein the command from the application program is for storing multiple variables, and wherein retrieving the ~~requested~~ variables comprises generating a data stream including the variables, and further comprising:

reading the retrieved variables from the data stream into a the buffer; and
processing each line in the buffer to determine each variable name and value, wherein each determined variable name and value is stored in the data object.

26. (Original) The article of manufacture of claim 25, wherein determining each variable name and value comprises:


determining a location of an equal sign;
setting the variable name to the string preceding the equal sign; and
setting the variable value to the string following the equal sign.

27. (Currently Amended) The article of manufacture of claim 26, wherein the variable name and value for each variable are maintained on at least one line, further comprising:

processing each line in the data stream ~~on a~~ line-by-line;

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 determining whether each line includes the equal sign, wherein, for each line including the equal sign, the variable name is set to the string preceding the equal sign and the variable value is set to the string following the equal sign; and
appending the content of each line not including the equal sign to the variable value.
